UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,681	01/07/2005	Ralf Neuhaus	2002P03767WOUS	5198

7590 04/15/2008

Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER	
PATEL, ASHOKKUMAR B	
ART UNIT	PAPER NUMBER
2154	

MAIL DATE	DELIVERY MODE
04/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/520,681	NEUHAUS ET AL.	
	Examiner	Art Unit	
	ASHOK B. PATEL	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) *1-7 and 10* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8,9 and 11-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *26* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1—26 are subject to examination. Claims 1-7, 10 and 26 are cancelled.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/26/2008 has been entered.

Response to Arguments

3. All of the Applicant's arguments with respect to claims 8, 9 and 11-25 have been considered but are moot in view of the new ground(s) of rejection.

4. Further, **it is noted that** the Applicant filed 37 CFR 1.131 to antedate and overcome the Goodman, the Dutta and the Bowman references. In the Declaration of Janet Hood Under 37 CFR § 1.131, item no. 4. it is DECLARED that :

> **"4. On July 2, 2001, prior to the critical date of September 13, 2001, an embodiment the invention disclosed and claimed in above-identified patent application was conceived.** In particular, in accordance with standard Siemens business practice, the Invention Disclosure form from that included such invention description was submitted for Siemens management (Dr. Idle) evaluation on July 3,2001. A copy is attached as Exhibit A and Exhibit B."

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 8, 9 and 11-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Traversat et al. (hereinafter Traversat) (US 2002/0184357 A1).

Referring to claim 8,

Traversat teaches a communication network (Fig. 1B) comprising:

a plurality of communication components (para. [0026], "A peer-to-peer network may include a plurality of peer nodes. Each peer node may comprise a network node that may be configured to communicate with other peer nodes over the peer-to-peer network. The peer-to-peer network may also include one or more rendezvous nodes. Each rendezvous node may cache one or more resource advertisements for discovery by the peer nodes on the peer-to-peer network. Each resource advertisement may include an indication of how to access a corresponding network resource. Network resources may include, but are not limited to, peers, peer groups, services, content, pipes and pipe endpoints. The resource advertisements may be formatted according to a peer-

to-peer platform discovery protocol."), at least some of which comprise both client and server functionalities (para. [0027], "Rendezvous nodes preferably cache information that may be useful to peer nodes including new peer nodes. Rendezvous nodes may provide an efficient mechanism for isolated peer nodes to discover network resources and may make peer node discovery more practical and efficient. In one embodiment, peer nodes may become rendezvous nodes. Peer nodes may elect themselves, through the discovery protocol, to become rendezvous nodes. Alternatively, peer nodes may be appointed rendezvous nodes by their peer groups. Preferably, a peer group is not required to have a rendezvous node. In one embodiment, any members of a peer group may become rendezvous nodes in a peer group."), at least some of the client functionalities including a search function that ascertains network addresses of others of the communication components that allow the server functionalities of the others to be used (para. [0031], "The rendezvous node may not currently have advertisements cached that satisfy the discovery query message. In this case, in one embodiment, the rendezvous node may broadcast a discovery query message on the peer-to-peer network to discovery advertisements satisfying the peer node's discovery query message. In another embodiment, the rendezvous node may forward the discovery query message to one or more other rendezvous nodes on the peer-to-peer network. Alternatively, the rendezvous node may forward the discovery query message to one or more rendezvous nodes specializing in caching advertisements on a particular topic specified by discovery query message. The one or more other rendezvous

nodes may respond with one or more response messages including advertisements of the type specified by the discovery query message. The rendezvous node may cache the advertisements in the response messages. The rendezvous node and the other responding rendezvous node may provide route discovery for the resources advertised in the response message. The rendezvous nodes may include route information in the response message. The rendezvous node may forward the one or more response messages to the peer node.", para.[0029] In one embodiment, peer nodes may discover advertisements using a rendezvous node. For example, a peer node may broadcast discovery query message. Discovery query message may be formatted in accordance with a peer-to-peer platform discovery protocol. The discovery query message may include criteria specifying a particular type of network resource in which the peer node is interested. The discovery query message may include a security credential. The rendezvous nodes receiving the discovery query message may use the security credential to authenticate the sender. The discovery query message may also include the TTL as described above.", para. [0082], "A peer group may theoretically be as large as the entire connected universe. Naming anything uniquely is a challenge in such a large namespace. In one embodiment, the peer-to-peer platform may support and/or provide sophisticated naming and binding services. In one embodiment, the peer-to-peer platform may use a universal unique identifier (UUID), for example, a 64- or 128-bit datum, to refer to an entity (e.g. a peer, peer group, pipe, content, etc.). For example, UUIDs may be embedded in advertisements for

internal use. UUIDs preferably may be used to guarantee that each entity has a unique UUID within a local runtime environment and serves as a canonical way of referring to an entity, but because a global state is not assumed, it may not be possible to provide a guarantee of uniqueness across an entire community that may consist of millions of peers. This may not be a problem because a UUID may be used within the peer-to-peer platform as an internal identifier. This may become significant only after the UUID is securely bound to other information such as a name and a network address. In one embodiment, Uniform Resource Name (URN) format may be used for the expression of UUIDs.");

a retrieval mechanism in said at least some of the client functionalities that obtains information about the server functionalities of said other communication components (para.[0031], "[0031] The rendezvous node may not currently have advertisements cached that satisfy the discovery query message. In this case, in one embodiment, the rendezvous node may broadcast a discovery query message on the peer-to-peer network to discovery advertisements satisfying the peer node's discovery query message. In another embodiment, the rendezvous node may forward the discovery query message to one or more other rendezvous nodes on the peer-to-peer network. Alternatively, the rendezvous node may forward the discovery query message to one or more rendezvous nodes specializing in caching advertisements on a particular topic specified by discovery query message. The one or more other rendezvous nodes may respond with one or more response messages including advertisements of the type specified by the discovery query message. The rendezvous node may

cache the advertisements in the response messages. The rendezvous node and the other responding rendezvous node may provide route discovery for the resources advertised in the response message. The rendezvous nodes may include route information in the response message. The rendezvous node may forward the one or more response messages to the peer node."); and

wherein the server functionalities provide usable services in the communication network [0090] The peer-to-peer platform may further include a peer-to-peer services layer 140. This layer may provide capabilities that may not be absolutely necessary for a peer-to-peer network to operate but that may be desirable to provided added functionality beyond the core layer 120 in the peer-to-peer environment. The service layer 140 may deal with higher-level concepts such as search and indexing, directory, storage systems, file sharing, distributed file systems, resource aggregation and renting, protocol translation, authentication and PKI (public key infrastructure) systems. These services, which may make use of the protocols and building blocks provided by the core layer 120, may be useful by themselves but also may be included as components in an overall P2P system. Thus, services may include one or more services 144 provided by the peer-to-peer platform. These platform-provided services 144 may include indexing, searching and file sharing services, for example. The services layer 140 may provide hooks for supporting generic services (such as searching, sharing and added security) that are used in many P2P applications. Thus, services may also include one or more services 142 not provided as part of the peer-to-peer platform but rather provided by the peer-to-peer platform

community. These services 142 may be user-defined and may be provided, for example, to member peers in a peer group as a peer group service.")

Referring to claim 9,

Traversat teaches the communication network as claimed in Claim 8, wherein the communication network provides for a self-administration on the basis of the information ascertained by the search functions. (para. [0081] The peer-to-peer platform may provide mechanisms through which peers may discover each other, communicate with each other, and cooperate with each other to form peer groups. Peers may discover each other on the network to form transient or persistent relationships called peer groups. A peer group is a collection of peers connected by a network that share a common set of interests and that have agreed upon a common set of rules to publish, share and access any computer content (code, data, applications, or other collections of computer representable resources), and communicate among themselves. Peer groups may also be statically predefined. The peers in a peer group may cooperate to provide a common set of services. A peer group may be viewed as an abstract region of the network, and may act as a virtual subnet. The concept of a region virtualizes the notion of routers and firewalls, subdividing the network in a self-organizing fashion without respect to actual physical network boundaries. In one embodiment, peer groups implicitly define a region scope that may limit peer propagation requests. Conceptually, a peer group may be viewed as a virtual entity that speaks the set of peer group protocols.")

Referring to claim 11,

Traversat teaches the communication network as claimed in Claim 8, wherein a server functionality is selected for use by using a state information when a plurality of server functionalities are present (para. [0097] A typical peer-to-peer platform network may provide an inherently nondeterministic topology/response structure. In a peer-to-peer platform network, a specific resource request may not return for minutes, hours, or even days; in fact, it may never return at all. In addition, people from different parts of the world requesting the same resource are likely to get different copies of the resource from completely different locations. Peers may obtain content from multiple servers, ideally reaching a nearby one that is up and running. The original source peer need not service every resource request; in fact, it does not even have to be up and running. The nondeterministic structure may also help provide the optimized use of network bandwidth. The concentrated localized traffic congestion typical of today's Web doesn't affect P2P networking. The nondeterministic structure may also help provide a lowered cost of content distribution. The P2P network can absorb contents and replicate it for easy access. The nondeterministic structure may also help provide leveraged computing power from every node in the network. With asynchronous operations, a user may issue many requests for many resources or services simultaneously and have the network do the work. The nondeterministic structure may also help provide unlimited scalability. A properly designed P2P application may span the entire known connected universe without hitting scalability limits; this is typically not possible with

centralized schemes. Note, however, that the peer-to-peer platform also may support deterministic, synchronous applications.")

Referring to claim 12,

Traversat teaches the communication network as claimed in Claim 11, wherein the state information comprises a current utilization level of the server functionalities that are present a plurality of times (para. [0097] A typical peer-to-peer platform network may provide an inherently nondeterministic topology/response structure. In a peer-to-peer platform network, a specific resource request may not return for minutes, hours, or even days; in fact, it may never return at all. In addition, people from different parts of the world requesting the same resource are likely to get different copies of the resource from completely different locations. Peers may obtain content from multiple servers, ideally reaching a nearby one that is up and running. The original source peer need not service every resource request; in fact, it does not even have to be up and running. The nondeterministic structure may also help provide the optimized use of network bandwidth. The concentrated localized traffic congestion typical of today's Web doesn't affect P2P networking. The nondeterministic structure may also help provide a lowered cost of content distribution. The P2P network can absorb contents and replicate it for easy access. The nondeterministic structure may also help provide leveraged computing power from every node in the network. With asynchronous operations, a user may issue many requests for many resources or services simultaneously and have the network do the work. The nondeterministic structure may also help provide unlimited scalability. A

properly designed P2P application may span the entire known connected universe without hitting scalability limits; this is typically not possible with centralized schemes. Note, however, that the peer-to-peer platform also may support deterministic, synchronous applications.").

Referring to claim 13,

Traversat teaches the communication network as claimed in Claim 11, wherein the state information comprises the use cost of the server functionalities that are present a plurality of times (para. [0097] A typical peer-to-peer platform network may provide an inherently nondeterministic topology/response structure. In a peer-to-peer platform network, a specific resource request may not return for minutes, hours, or even days; in fact, it may never return at all. In addition, people from different parts of the world requesting the same resource are likely to get different copies of the resource from completely different locations. Peers may obtain content from multiple servers, ideally reaching a nearby one that is up and running. The original source peer need not service every resource request; in fact, it does not even have to be up and running. The nondeterministic structure may also help provide the optimized use of network bandwidth. The concentrated localized traffic congestion typical of today's Web doesn't affect P2P networking. The nondeterministic structure may also help provide a lowered cost of content distribution. The P2P network can absorb contents and replicate it for easy access. The nondeterministic structure may also help provide leveraged computing power from every node in the network. With asynchronous operations, a user may issue many requests for many resources or services

simultaneously and have the network do the work. The nondeterministic structure may also help provide unlimited scalability. A properly designed P2P application may span the entire known connected universe without hitting scalability limits; this is typically not possible with centralized schemes. Note, however, that the peer-to-peer platform also may support deterministic, synchronous applications." And para. [0083])

Referring to claim 14,

Traversat teaches the communication network as claimed in Claim 8, wherein the client functionality is designed to retrieve an authorization before using a server functionality (para. [0083] The core layer 120 provides core support for peer-to-peer services and applications. In a multi-platform, secure execution environment, the core mechanisms of peer groups, peer pipes and peer monitoring may be provided. Peer groups 122 may establish a set of peers and naming within a peer group with mechanisms to create policies for creation and deletion, membership, advertising and discovery of other peer groups and peer nodes, communication, security, and content sharing. Pipes provide virtual communication channels among peers. Messages sent in pipes may support transfer of data, content, and code in a protocol-independent manner, allowing a range of security, integrity, and privacy options. In one embodiment, messages may be structured with a markup language such as XML. Peer monitoring 128 enables control of the behavior and activity of peers in a peer group and can be used to implement peer management functions including access control, priority setting, traffic metering, and bandwidth balancing.")

Referring to claim 15,

teaches the communication network as claimed in Claim 14, wherein at least one server functionality is provided for managing the authorization ((para. [0083] The core layer 120 provides core support for peer-to-peer services and applications. In a multi-platform, secure execution environment, the core mechanisms of peer groups, peer pipes and peer monitoring may be provided. Peer groups 122 may establish a set of peers and naming within a peer group with mechanisms to create policies for creation and deletion, membership, advertising and discovery of other peer groups and peer nodes, communication, security, and content sharing. Pipes provide virtual communication channels among peers. Messages sent in pipes may support transfer of data, content, and code in a protocol-independent manner, allowing a range of security, integrity, and privacy options. In one embodiment, messages may be structured with a markup language such as XML. Peer monitoring 128 enables control of the behavior and activity of peers in a peer group and can be used to implement peer management functions including access control, priority setting, traffic metering, and bandwidth balancing.")

Referring to claim 16,

Claim 16 is a claim to a method that is implemented in a communication network of claim 8. Therefore claim 16 is rejected for the reasons set forth for claim 8.

Referring to claim 17,

Claim 17 is a claim to a method that is implemented in a communication network of claim 9. Therefore claim 17 is rejected for the reasons set forth for claim 9.

Referring to claim 18,

Claim 18 is a claim to a method that is implemented in a communication network of claim 10. Therefore claim 18 is rejected for the reasons set forth for claim 10.

Referring to claim 19,

Claim 19 is a claim to a method that is implemented in a communication network of claim 11. Therefore claim 19 is rejected for the reasons set forth for claim 11.

Referring to claim 20,

Claim 20 is a claim to a method that is implemented in a communication network of claim 12. Therefore claim 20 is rejected for the reasons set forth for claim 12.

Referring to claim 21,

Claim 21 is a claim to a method that is implemented in a communication network of claim 13. Therefore claim 21 is rejected for the reasons set forth for claim 13

Referring to claim 22,

Claim 22 is a claim to a method that is implemented in a communication network of claim 14. Therefore claim 22 is rejected for the reasons set forth for claim 14.

Referring to claim 23,

Claim 23 is a claim to a method that is implemented in a communication network of claim 15. Therefore claim 23 is rejected for the reasons set forth for claim 15.

Referring to claim 24,

Traversat teaches the method as claimed in Claim 16, wherein the current address of all of the communication components are ascertained (para. [0028] Rendezvous nodes may be helpful to an isolated peer node by quickly seeding it with lots of information. In one embodiment, a network of rendezvous nodes may help to provide long-range discovery capabilities. A discovery message from a peer node may be forwarded from a first rendezvous node to a second, and so long, to discover peer nodes and/or peer groups that are "distant" on the network from the requesting peer node. In one embodiment, only rendezvous nodes may forward a discovery request to another rendezvous node. This restriction may limit the propagation of requests within the network. Each discovery query message may include a time-to-live (TTL) indicator. TTL's may also help limit the propagation of requests within the network. The TTL may indicate a length of time during which the resource advertisement is valid. The rendezvous nodes receiving the discovery query message may decrement the time-to-live indicator to reflect the current time-to-live. When the TTL expires, the discovery query message may be deleted or invalidated. Thus, Rendezvous nodes may help prevent exponential propagation of requests within the network by limiting forwarding and by using TTL's.")

Referring to claim 25,

Traversat teaches the method as claimed in Claim 16, wherein the server functionality of all of the communication components are retrieved [0029] In one embodiment, peer nodes may discover advertisements using a rendezvous node. For example, a peer node may broadcast discovery query message. Discovery query message may be formatted in accordance with a peer-to-peer platform discovery protocol. The discovery query message may include criteria specifying a particular type of network resource in which the peer node is interested. The discovery query message may include a security credential. The rendezvous nodes receiving the discovery query message may use the security credential to authenticate the sender. The discovery query message may also include the TTL as described above.")

Conclusion

Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 6:30 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan A. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ashok B. Patel/

Examiner, Art Unit 2154